

SEQUENCE LISTING

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<120> INTERFERON-ALPHA INDUCED GENE

<130> 046658/288239

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<170> PatentIn version 3.0

<210> 1

<211> 8157

<212> DNA

<213> HOMO SAPIENS

<220>

<221> CDS

<222> (101)..(5902)

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 Asn Leu Asn Thr Lys Leu Gln Met Tyr Phe Gln Ser Pro Lys Arg Ser
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 Gly Gly Gly Glu Cys Glu Val Arg Gln Asp Pro Arg Ser Pro Ser Arg
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 Phe Leu Val Phe Phe Tyr Pro Glu Asp Gly Lys Trp Arg Gln Gly Thr
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 His Gly Arg Val Thr Arg Pro Thr Ser Ala Ala Val Ala Glu Ala
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Leu Ser Leu Asp Arg Phe Leu Ser Phe Pro Val Val Val Val Leu Leu	
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Phe Val Val Val Val Val Glu Val Ser Leu Ser Ser Tyr His Pro Phe	
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Leu Ser Phe Pro Val Val Ile Ile Leu Val Trp Gly Arg Lys Leu Ile	
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Gln Gly Ser Arg Gly His Leu Gly Glu Gly Gln Arg Arg Tyr Leu Lys	
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Ser His Cys Leu Asn Val Asn Val Glu Pro Ser Gln Arg Pro His Trp	
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Arg Gly Cys Arg Ser Thr Thr Val Arg Gln Lys Val Leu Glu Arg Lys	
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Gln Leu Pro Ala Thr Pro Asp Glu Ile Asp His Val Phe Glu Glu Glu	
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Asp Ile Met Leu Ile Leu Leu Val Glu Asn Ile Ser Gly Leu Ser Asn	
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Lys His His Ser Ile Lys Gln Leu Gln Leu Ser Pro Arg Leu Leu Glu				
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Val Thr Asn Thr Ile Arg Val Glu Asn Leu Pro Pro Gly Ala Asp Asp				
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Tyr Ser Leu Lys Leu Phe Phe Glu Asn Pro Tyr Asn Gly Gly Gly Arg				
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Val Ala Asn Val Glu Tyr Phe Pro Glu Glu Ser Ser Ala Leu Ile Glu				
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Phe Phe Asp Arg Lys Val Leu Asp Thr Ile Met Ala Thr Lys Leu Asp				
410	415	420		
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425	430	435		
aca gcc ttg tat gga aag gag aag cct ctg atc aag ctt cca gca cca				1459
Thr Ala Leu Tyr Gly Lys Glu Lys Pro Leu Ile Lys Leu Pro Ala Pro				
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Phe Glu Glu Ser Leu Asp Leu Pro Leu Trp Lys Phe Leu Gln Lys Lys				
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Asn His Leu Ile Glu Glu Ile Asn Asp Glu Met Arg Arg Cys His Cys				
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Glu Leu Thr Trp Ser Gln Leu Ser Gly Lys Val Thr Ile Arg Pro Ala				
490	495	500		
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Ala Thr Leu Val Asn Glu Gly Arg Pro Arg Ile Lys Thr Trp Gln Ala				
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gat act tcc aca aca ctc tct agc atc agg tct aaa tat aaa gtc aac				1699
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cca att aaa gtg gat cca aca atg tgg gac acc ata aaa aat gat gtg				1747
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535	540	545		

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gag att tgt tac gat aga gtc act caa cac ttg tgc ttg aaa gga cct Glu Ile Cys Tyr Asp Arg Val Thr Gln His Leu Cys Leu Lys Gly Pro 630 635 640 645	2035
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775 780 785	
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790 795 800 805	
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Leu Val Glu Val Lys Pro Ser Leu Val Ile Asp Tyr Leu Lys Thr Glu	
810 815 820	
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Phe Asn Pro Glu Asn Lys Gln Lys Gly Ile Leu Leu Thr Gly Ser Lys	
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Thr Glu Val Leu Lys Ala Val Asp Ile Val Lys Gln Val Trp Asp Ser	
855 860 865	
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Val Val Val Asn Ala Ser Asn Glu Asp Leu Lys His Tyr Gly Gly Leu	
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Ala Ala Ala Leu Ser Lys Ala Ala Gly Pro Glu Leu Gln Ala Asp Cys	
970 975 980	
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Asp Gln Ile Val Lys Arg Glu Gly Arg Leu Leu Pro Gly Asn Ala Thr	
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Val	Gly	Pro	Arg	Trp	Ser	Gly	Tyr	Glu	Ala	Pro	Arg	Cys	Val	Tyr		
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Leu	Leu	Arg	Arg	Ala	Val	Gln	Leu	Ser	Leu	Cys	Leu	Ala	Glu	Lys		
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Tyr	Lys	Tyr	Arg	Ser	Ile	Ala	Ile	Pro	Ala	Ile	Ser	Ser	Gly	Val		
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Phe	Gly	Phe	Pro	Leu	Gly	Arg	Cys	Val	Glu	Thr	Ile	Val	Ser	Ala		
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Ile	Lys	Glu	Asn	Phe	Gln	Phe	Lys	Lys	Asp	Gly	His	Cys	Leu	Lys		
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Thr	Ser	Trp	Glu	Lys	Gly	Ser	Leu	Val	Ser	Pro	Gly	Gly	Leu	Gln		
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Met	Leu	Leu	Val	Lys	Glu	Gly	Val	Gln	Asn	Ala	Lys	Thr	Asp	Val		
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Val	Val	Asn	Ser	Val	Pro	Leu	Asp	Leu	Val	Leu	Ser	Arg	Gly	Pro		
		1165					1170					1175				
ctt	tct	aag	tcc	ctc	ttg	gaa	aaa	gct	gga	cca	gag	ctc	cag	gag		3676
Leu	Ser	Lys	Ser	Leu	Leu	Glu	Lys	Ala	Gly	Pro	Glu	Leu	Gln	Glu		
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Glu	Leu	Asp	Thr	Val	Gly	Gln	Gly	Val	Ala	Val	Ser	Met	Gly	Thr		
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Val	Leu	Lys	Thr	Ser	Ser	Trp	Asn	Leu	Asp	Cys	Arg	Tyr	Val	Leu		

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His Val Val Ala Pro Glu Trp Arg Asn Gly Ser Thr Ser Ser Leu			
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Ser Leu Ser Leu Lys Ser Ile Ala Phe Pro Ala Ile Gly Thr Gly			
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Asn Leu Gly Phe Pro Lys Asn Ile Phe Ala Glu Leu Ile Ile Ser			
1270	1275	1280	
gag gtg ttc aaa ttt agt agc aag aat cag ctg aaa act tta caa 3991			
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Gln Glu Cys Glu Lys Lys Asn Tyr Ser Ser Ile Cys Leu Pro Ala	
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att ggg aca gga aat gcc aaa caa cac cca gat aag gtt gct gaa	4531
Ile Gly Thr Gly Asn Ala Lys Gln His Pro Asp Lys Val Ala Glu	
1465 1470 1475	
gcc ata att gat gcc att gaa gac ttt gtc cag aaa gga tca gcc	4576
Ala Ile Ile Asp Ala Ile Glu Asp Phe Val Gln Lys Gly Ser Ala	
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Gln Ser Val Lys Lys Val Lys Val Val Ile Phe Leu Pro Gln Val	
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Val Thr Cys Val Glu Tyr Ala Ile Ser Trp Leu Gln Asp Leu Ile	
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Lys Leu Asn Ile Asn Ile Ser Leu Asp His Lys Arg Pro Leu Ile	
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Ile Glu Ala Met Ile Lys Arg Val Arg Leu Ala Lys Glu Gln Glu	
1645 1650 1655	
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Ser Arg Ala Asp Cys Ile Ser Glu Phe Ile Glu Trp Gln Tyr Asn	
1660 1665 1670	
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1675 1680 1685	
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Leu Glu Asp Ala Arg Arg Glu Lys Lys Lys Thr Val Asp Val Lys	
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Ile Asn His Arg His Tyr Thr Val Asn Leu Asn Thr Tyr Thr Ala	
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Thr Asp Thr Lys Gly His Ser Leu Ser Val Gln Arg Leu Thr Lys	
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Ser Lys Val Asp Ile Pro Ala His Trp Ser Asp Met Lys Gln Gln	
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Glu Lys Ile Glu Arg Ile Gln Asn Pro Asp Leu Trp Asn Ser Tyr	
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Gln Ala Lys Lys Lys Thr Met Asp Ala Lys Asn Gly Gln Thr Met	
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Asn Glu Lys Gln Leu Phe His Gly Thr Asp Ala Gly Ser Val Pro	
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His Val Asn Arg Asn Gly Phe Asn Arg Ser Tyr Ala Gly Lys Asn	
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gct gtg gca tat gga aag gga acc tat ttt gct gtc aat gcc aat	5656
Ala Val Ala Tyr Gly Lys Gly Thr Tyr Phe Ala Val Asn Ala Asn	
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Tyr Ser Ala	Asn Asp Thr Tyr Ser	Arg Pro Asp Ala Asn	Gly Arg	
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Lys His Val	Tyr Tyr Val Arg Val	Leu Thr Gly Ile Tyr	Thr His	
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Gly Asn His	Ser Leu Ile Val Pro	Pro Ser Lys Asn Pro	Gln Asn	
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cct act gac	ctg tat gac act gtc	aca gat aat gtg cac	cat cca	5836
Pro Thr Asp	Leu Tyr Asp Thr Val	Thr Asp Asn Val His	His Pro	
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Ser Leu Phe	Val Ala Phe Tyr Asp	Tyr Gln Ala Tyr Pro	Glu Tyr	
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Leu Ile Thr	Phe Arg Lys			
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Arg	Ala	Ser	Asn	Ser	Leu	Ser	Leu	Asp	Arg	Phe	Leu	Ser	Phe	Pro	Val
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Val	Leu	Gly	Asp	Ser	Gln	Gly	Ser	Arg	Gly	His	Leu	Gly	Glu	Gly	Gln
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Arg	Arg	Tyr	Leu	Lys	Ser	His	Cys	Leu	Asn	Val	Asn	Val	Glu	Pro	Ser
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Gln	Arg	Pro	His	Trp	Arg	Gly	Cys	Arg	Ser	Thr	Thr	Val	Arg	Gln	Lys
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Phe	Lys	Leu	Thr	Val	Gln	Leu	Pro	Ala	Thr	Pro	Asp	Glu	Ile	Asp	His
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Val	Phe	Glu	Glu	Glu	Leu	Leu	Thr	Lys	Ala	Asn	Val	Ser	Glu	Glu	Leu
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Pro	Gly	Ala	Asp	Asp	Tyr	Ser	Leu	Lys	Leu	Phe	Phe	Glu	Asn	Pro	Tyr
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Ser	Ala	Leu	Ile	Glu	Phe	Phe	Asp	Arg	Lys	Val	Leu	Asp	Thr	Ile	Met
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Ala	Thr	Lys	Leu	Asp	Phe	Asn	Lys	Met	Pro	Leu	Ser	Val	Phe	Pro	Tyr
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Tyr	Leu	Lys	Thr	Glu	Lys	Lys	Leu	Phe	Trp	Pro	Lys	Ile	Lys	Lys	Val	
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Val Lys Glu Asn Leu Val Ser Asp Lys Phe Pro Lys Ala Lys Asp Thr	
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caa ggt ttt tat ggg act gtt tct agc cct gat tca ggt gtg tat gaa	149
Gln Gly Phe Tyr Gly Thr Val Ser Ser Pro Asp Ser Gly Val Tyr Glu	
25 30 35	
atg aag att ggc tcc atc atc ttc cag gtg gct tct gga gat atc acg	197
Met Lys Ile Gly Ser Ile Ile Phe Gln Val Ala Ser Gly Asp Ile Thr	
40 45 50	

aaa gaa gag gca gat gtg att gta aat tca aca tca aac tca ttc aat	245
Lys Glu Glu Ala Asp Val Ile Val Asn Ser Thr Ser Asn Ser Phe Asn	
55 60 65 70	
ctc aaa gca ggg gtc tcc aaa gca att tta gaa tgt gct gga caa aat	293
Leu Lys Ala Gly Val Ser Lys Ala Ile Leu Glu Cys Ala Gly Gln Asn	
75 80 85	
gta gaa agg gaa tgt tct cag caa gct cag cag cgc aaa aat gat tat	341
Val Glu Arg Glu Cys Ser Gln Gln Ala Gln Gln Arg Lys Asn Asp Tyr	
90 95 100	
ata atc acc gga ggt gga ttt ttg agg tgc aag aat atc att cat gta	389
Ile Ile Thr Gly Gly Gly Phe Leu Arg Cys Lys Asn Ile Ile His Val	
105 110 115	
att ggt gga aat gat gtc aag agt tca gtt tcc tct gtt ttg cag gag	437
Ile Gly Gly Asn Asp Val Lys Ser Ser Val Ser Ser Val Leu Gln Glu	
120 125 130	
tgt gaa aaa aaa aat tac tca tcc att tgc ctc cca gcc att ggg aca	485
Cys Glu Lys Lys Asn Tyr Ser Ser Ile Cys Leu Pro Ala Ile Gly Thr	
135 140 145 150	
gga aat gcc aaa caa cac cca gat aag gtt gct gaa gcc ata att gat	533
Gly Asn Ala Lys Gln His Pro Asp Lys Val Ala Glu Ala Ile Ile Asp	
155 160 165	
gcc att gaa gac ttt gtc cag aaa gga tca gcc cag tct gtg aaa aaa	581
Ala Ile Glu Asp Phe Val Gln Lys Gly Ser Ala Gln Ser Val Lys Lys	
170 175 180	
gtt aaa gtt gtt atc ttt ctg cct caa gta ctg gat gtg ttt tat gct	629
Val Lys Val Val Ile Phe Leu Pro Gln Val Leu Asp Val Phe Tyr Ala	
185 190 195	
aac atg aag aaa aga gaa ggg act cag ctt tct tcc caa cag tct gtg	677
Asn Met Lys Lys Arg Glu Gly Thr Gln Leu Ser Ser Gln Gln Ser Val	
200 205 210	
atg tct aaa ctt gca tca ttt ttg ggc ttt tca aag caa tct ccc caa	725
Met Ser Lys Leu Ala Ser Phe Leu Gly Phe Ser Lys Gln Ser Pro Gln	
215 220 225 230	
aaa aag aat cat ttg gtt ttg gaa aag aaa aca gaa tca gca act ttt	773
Lys Lys Asn His Leu Val Leu Glu Lys Lys Thr Glu Ser Ala Thr Phe	
235 240 245	
cgg gtg tgt ggt gaa aat gtc acg tgt gtg gaa tat gct atc tcc tgg	821
Arg Val Cys Gly Glu Asn Val Thr Cys Val Glu Tyr Ala Ile Ser Trp	
250 255 260	
cta caa gac ctg att gaa aaa gaa cag tgt cct tac acc agt gaa gat	869
Leu Gln Asp Leu Ile Glu Lys Glu Gln Cys Pro Tyr Thr Ser Glu Asp	
265 270 275	

gag tgc atc aaa gac ttt gat gaa aag gag tat cag gag ttg aat gag Glu Cys Ile Lys Asp Phe Asp Glu Lys Glu Tyr Gln Glu Leu Asn Glu 280 285 290	917
ctg cag aag aag tta aat att aac att tcc ctg gac cat aag aga cct Leu Gln Lys Lys Leu Asn Ile Asn Ile Ser Leu Asp His Lys Arg Pro 295 300 305 310	965
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gaa att gag gcg atg atc aag aga gtt cga ttg gcc aaa gaa cag gaa Glu Ile Glu Ala Met Ile Lys Arg Val Arg Leu Ala Lys Glu Gln Glu 330 335 340	1061
tcc cgg gca gat tgt atc agt gag ttt ata gaa tgg cag tat aat gac Ser Arg Ala Asp Cys Ile Ser Glu Phe Ile Glu Trp Gln Tyr Asn Asp 345 350 355	1109
aat aac act tct cat tgt ttt aac aaa atg acc aat ctg aaa tta gag Asn Asn Thr Ser His Cys Phe Asn Lys Met Thr Asn Leu Lys Leu Glu 360 365 370	1157
gat gca agg aga gaa aag aaa aaa aca gtt gat gtc aaa att aat cat Asp Ala Arg Arg Glu Lys Lys Lys Thr Val Asp Val Lys Ile Asn His 375 380 385 390	1205
cgg cac tac aca gtg aac ttg aac aca tac act gcc aca gac aca aag Arg His Tyr Thr Val Asn Leu Asn Thr Tyr Thr Ala Thr Asp Thr Lys 395 400 405	1253
ggc cac agt tta tct gtt cag cgc ctc acg aaa tcc aaa gtt gac atc Gly His Ser Leu Ser Val Gln Arg Leu Thr Lys Ser Lys Val Asp Ile 410 415 420	1301
cct gca cac tgg agt gat atg aag cag cag aat ttc tgt gtg gtg gag Pro Ala His Trp Ser Asp Met Lys Gln Gln Asn Phe Cys Val Val Glu 425 430 435	1349
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cca gat ctc tgg aat agc tac cag gca aag aaa aaa act atg gat gcc Pro Asp Leu Trp Asn Ser Tyr Gln Ala Lys Lys Lys Thr Met Asp Ala 475 480 485	1493
aag aat ggc cag aca atg aat gag aag caa ctc ttc cat ggg aca gat Lys Asn Gly Gln Thr Met Asn Glu Lys Gln Leu Phe His Gly Thr Asp 490 495 500	1541
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Ala Gly Ser Val Pro His Val Asn Arg Asn Gly Phe Asn Arg Ser Tyr	
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Ala Gly Lys Asn Ala Val Ala Tyr Gly Lys Gly Thr Tyr Phe Ala Val	
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Asn Ala Asn Tyr Ser Ala Asn Asp Thr Tyr Ser Arg Pro Asp Ala Asn	
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Gly Arg Lys His Val Tyr Tyr Val Arg Val Leu Thr Gly Ile Tyr Thr	
555 560 565	
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His Gly Asn His Ser Leu Ile Val Pro Pro Ser Lys Asn Pro Gln Asn	
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cct act gac ctg tat gac act gtc aca gat aat gtg cac cat cca agt	1829
Pro Thr Asp Leu Tyr Asp Thr Val Thr Asp Asn Val His His Pro Ser	
585 590 595	
tta ttt gtg gca ttt tat gac tac caa gca tac cca gag tac ctt att	1877
Leu Phe Val Ala Phe Tyr Asp Tyr Gln Ala Tyr Pro Glu Tyr Leu Ile	
600 605 610	
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Thr Phe Arg Lys	
615	
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 <212> PRT
 <213> Homo sapiens

<400> 4

Met Asn Leu Pro Arg Arg Val Lys Glu Asn Leu Val Ser Asp Lys Phe

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Pro Lys Ala Lys Asp Thr Gln Gly Phe Tyr Gly Thr Val Ser Ser Pro	20	25	30
Asp Ser Gly Val Tyr Glu Met Lys Ile Gly Ser Ile Ile Phe Gln Val	35	40	45
Ala Ser Gly Asp Ile Thr Lys Glu Glu Ala Asp Val Ile Val Asn Ser	50	55	60
Thr Ser Asn Ser Phe Asn Leu Lys Ala Gly Val Ser Lys Ala Ile Leu	65	70	75
Glu Cys Ala Gly Gln Asn Val Glu Arg Glu Cys Ser Gln Gln Ala Gln	85	90	95
Gln Arg Lys Asn Asp Tyr Ile Ile Thr Gly Gly Gly Phe Leu Arg Cys	100	105	110
Lys Asn Ile Ile His Val Ile Gly Gly Asn Asp Val Lys Ser Ser Val	115	120	125
Ser Ser Val Leu Gln Glu Cys Glu Lys Lys Asn Tyr Ser Ser Ile Cys	130	135	140
Leu Pro Ala Ile Gly Thr Gly Asn Ala Lys Gln His Pro Asp Lys Val	145	150	155
Ala Glu Ala Ile Ile Asp Ala Ile Glu Asp Phe Val Gln Lys Gly Ser	165	170	175
Ala Gln Ser Val Lys Lys Val Lys Val Val Ile Phe Leu Pro Gln Val	180	185	190
Leu Asp Val Phe Tyr Ala Asn Met Lys Lys Arg Glu Gly Thr Gln Leu	195	200	205
Ser Ser Gln Gln Ser Val Met Ser Lys Leu Ala Ser Phe Leu Gly Phe	210	215	220
Ser Lys Gln Ser Pro Gln Lys Lys Asn His Leu Val Leu Glu Lys Lys	225	230	235
Thr Glu Ser Ala Thr Phe Arg Val Cys Gly Glu Asn Val Thr Cys Val	245	250	255
Glu Tyr Ala Ile Ser Trp Leu Gln Asp Leu Ile Glu Lys Glu Gln Cys	260	265	270
Pro Tyr Thr Ser Glu Asp Glu Cys Ile Lys Asp Phe Asp Glu Lys Glu	275	280	285
Tyr Gln Glu Leu Asn Glu Leu Gln Lys Lys Leu Asn Ile Asn Ile Ser	290	295	300
Leu Asp His Lys Arg Pro Leu Ile Lys Val Leu Gly Ile Ser Arg Asp			

305		310		315		320
Val Met Gln Ala Arg Asp Glu Ile Glu Ala Met Ile Lys Arg Val Arg						
		325		330		335
Leu Ala Lys Glu Gln Glu Ser Arg Ala Asp Cys Ile Ser Glu Phe Ile						
		340		345		350
Glu Trp Gln Tyr Asn Asp Asn Asn Thr Ser His Cys Phe Asn Lys Met						
		355		360		365
Thr Asn Leu Lys Leu Glu Asp Ala Arg Arg Glu Lys Lys Lys Thr Val						
		370		375		380
Asp Val Lys Ile Asn His Arg His Tyr Thr Val Asn Leu Asn Thr Tyr						
		385		390		395
Thr Ala Thr Asp Thr Lys Gly His Ser Leu Ser Val Gln Arg Leu Thr						
		405		410		415
Lys Ser Lys Val Asp Ile Pro Ala His Trp Ser Asp Met Lys Gln Gln						
		420		425		430
Asn Phe Cys Val Val Glu Leu Leu Pro Ser Asp Pro Glu Tyr Asn Thr						
		435		440		445
Val Ala Ser Lys Phe Asn Gln Thr Cys Ser His Phe Arg Ile Glu Lys						
		450		455		460
Ile Glu Arg Ile Gln Asn Pro Asp Leu Trp Asn Ser Tyr Gln Ala Lys						
		465		470		475
Lys Lys Thr Met Asp Ala Lys Asn Gly Gln Thr Met Asn Glu Lys Gln						
		485		490		495
Leu Phe His Gly Thr Asp Ala Gly Ser Val Pro His Val Asn Arg Asn						
		500		505		510
Gly Phe Asn Arg Ser Tyr Ala Gly Lys Asn Ala Val Ala Tyr Gly Lys						
		515		520		525
Gly Thr Tyr Phe Ala Val Asn Ala Asn Tyr Ser Ala Asn Asp Thr Tyr						
		530		535		540
Ser Arg Pro Asp Ala Asn Gly Arg Lys His Val Tyr Tyr Val Arg Val						
		545		550		555
Leu Thr Gly Ile Tyr Thr His Gly Asn His Ser Leu Ile Val Pro Pro						
		565		570		575
Ser Lys Asn Pro Gln Asn Pro Thr Asp Leu Tyr Asp Thr Val Thr Asp						
		580		585		590
Asn Val His His Pro Ser Leu Phe Val Ala Phe Tyr Asp Tyr Gln Ala						
		595		600		605

Tyr Pro Glu Tyr Leu Ile Thr Phe Arg Lys
610 615